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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/813,564	03/20/2001	Michael Scheetz	10006617-1	2711

7590 08/26/2004

HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER

NORRIS, TREMAYNE M

ART UNIT PAPER NUMBER

2137

DATE MAILED: 08/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/813,564

Applicant(s)

SCHEETZ ET AL.

Examiner

Tremayne M. Norris

Art Unit

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 March 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) ✓
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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2. Claims 2-4,10,12,14,15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 2,10,14 recite the limitations "the reading step" or "the setting step". There is insufficient antecedent basis for either of these limitations in the claims.

***Specification***

3. The disclosure is objected to because of the following informalities: There are many instances where the specification and the drawings do not coincide with each other. On page 3 line 31 and on page 8 line 1, "SCM cluster" is given reference number

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"17", however in fig.1, reference number 17 is a "CMS cluster". On page 4 lines 27-34 and on page 5 line 12, "SCM cluster" is now given reference number "18".

On page 7 lines 2-8, there are more instances where the specification and the drawings do not coincide with each other. In line 2, "generating a security key pair 76" should be "74", and "storing the security key pair 78" should be 76 if it is to match with fig. 3; this would make "method steps 72-78" become "72-76" in line 3. "76" should be changed to "74" in line 6, and "78" should be changed to "76" in line 8.

Also on page 8, reference number "88" should be "86", and there is not a reference number "92" in fig.4a as stated in line 25.

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Appropriate correction is required.

4. Claims 6,7,9,16 are objected to because of the following informalities: It is not clear where the step of "digitally signing the message with the managed node's public key" is taught within the specification.

Appropriate correction is required.

### ***Drawings***

5. The drawings are objected to because reference numbers do not coincide with drawings as outlined above. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the

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application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. Claims 1-5,8,10-15,20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shambroom (US pat 5,923,756), and further in view of Schell et al (US pat 6,615,350).

Regarding claim 1, Shambroom teaches a method for persisting and recovering security keys in order to authorize a daemon or a command-line interface ("CLI") comprising:

reading, with root as an effective user id, one or more security keys into a cache, wherein the root enables the reading of files including the one or more security keys (col.10 line 55 thru col.11 line 7);

attempting to retrieve a private key from the cache using a real user id, wherein the cached certain security keys may include the private key (col.11 lines 12-13); and

determining if the private key was retrieved from the cache, wherein a failure to retrieve the private key from the cache indicates that authorization failed (col.11 lines 44-46).

Shambroom does not teach the private key may be used to digitally sign a message. Schell teaches the private key may be used to digitally sign a message (col.17 lines 16-18). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Shambroom's method for providing secure remote command execution with Schell's module authentication method in order to allow a sender and receiver of a communication system to verify the integrity and authenticity of messages sent (Schell col.3 lines 1-9).

Regarding claim 2, Shambroom and Schell in combination teach the method of claim 1, in addition Shambroom teaches setting, with the root as the effective user id, the certain security keys, wherein the setting step triggers performance of the reading step (col.10 line 55 thru col.11 line 7).

Regarding claim 3, Shambroom and Schell in combination teach the method of claim 2, in addition Shambroom teaches calling a setKeys method, wherein the setKeys method includes the reading step (col.10 line 55 thru col.11 line 7).

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Regarding claim 4, Shambroom and Schell in combination teach the method of claim 3, in addition Shambroom teaches failure to retrieve the private key from the cache is caused by an error in the setKeys method (col.11 lines 44-46).

Regarding claim 5, Shambroom and Schell in combination teach the method of claim 2, in addition Shambroom teaches entering the CLI, wherein the CLI is entered by a non-root user on a managed node and the private key is a security key of the managed node (col.11 line 64 thru col.12 line 25; col.12 lines 43-54).

Regarding claim 8, Shambroom and Schell in combination teach the method of claim 1, in addition Shambroom teaches running a daemon process, wherein the



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daemon is run on a managed node and the private key is a security key of the managed node (col.11 line 64 thru col.12 line 25; col.12 lines 43-54).

Regarding claim 10, Shambroom and Schell in combination teach the method of claim 1, in addition Shambroom teaches the reading step is performed by an authentication class (col.8 lines 1-43).

Regarding claim 11, Shambroom and Schell in combination teach the method of claim 10, in addition Shambroom teaches the cache is a private variable in the authentication class (col.8 lines 42-54).

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Regarding claim 12, Shambroom and Schell in combination teach the method of claim 1, in addition Schell teaches generating a security key pair, wherein the security key pair comprises the private key and a corresponding public key (col.20 lines 44-49); serializing the security key pair as a key file (col.16 lines 26-29; col.16 lines 47-54; col.20 lines 44-49).

Shambroom teaches storing the key file, wherein the reading step comprises deserializing the key file and reading the key file into the cache (col.8 lines 42-54).

Claims 13-15 are substantially equivalent to claim 1-3 respectively, therefore claims 13-15 are rejected because of similar rationale.

Regarding claim 20, Shambroom teaches the method of claim 20, but does not teach the authentication class is a Java class running in a Java Virtual Machine, the method further comprising: initializing the Java Virtual Machine. Schell teaches the authentication class is a Java class running in a Java Virtual Machine, the method further comprising: initializing the Java Virtual Machine (col.31 lines 15-21). It

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***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Shambroom (US pat 5,923,756).

Regarding claim 17, Shambroom teaches a method for persisting and recovering security keys in order to authorize a daemon or a CLI, comprising:

initializing an authentication class, wherein the authentication class comprises a setKeys method that includes a reading step ;

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calling, with root as an effective user id, the setKeys method of the authentication class, wherein the root enables the reading of files including security keys;  
reading necessary security keys into a cache with the root; and  
retrieving the necessary security keys from the cache using a real user id (col.8 lines 1-54).

Regarding claim 18, Shambroom teaches the cache is a private variable in the authentication class (col.8 lines 42-54).

Regarding claim 19, Shambroom teaches the necessary security keys are a private key of a managed node on which the authentication class is running (col.12 lines 43-55) and a public key of a central management server to which the managed node is operatively connected (col.10 lines 25-35).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tremayne M. Norris whose telephone number is (703) 305-8045. The examiner can normally be reached on M-F 7:30AM-5:00PM alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (703) 306-3036. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tremayne Norris

August 20, 2004

Andrew Caldwell  
Andrew Caldwell